

genotypes in four districts show a significantly different distribution, Peshawar ($P=0.041$), Charsadda ($P=0.015$), Mardan ($P=0.05$), Sawabi ($P=0.040$) and non significant in Nowshehra district ($P=0.06$). Among the risk factors, use of unsterile equipments for medication, barbers and previous history of hospitalization are the main factors for HCV transmission. Genotype 3a and 3b, 1a, 1b and 2a are the common genotypes in North West Frontier Province. Genotype 4, 5, and 6 were not found even in a single sample.

There is a less awareness about the various mode of transmission of HCV among the population. A predominant number of them are considering interferon treatment as vaccine for hepatitis B and C.

PP-134 Fibrosure, APRI and Forns score versus liver biopsy in chronic HCV infection in Egypt

H. Abd El Moety¹*, A.M.R. Abd El Moety², S. Zaki³, S. Baioumy⁴. ¹Chemical Pathology, Medical Research Institute, Alexandria University, ²Internal Medicine, Faculty of Medicine, Alexandria University, ³Microbiology, Faculty of Medicine, Alexandria University, ⁴Pathology, Tanta University, Egypt

Introduction: Chronic infection with HCV a major health problem. Clinical management of chronic HCV dependent on extent liver fibrosis. Liver biopsy gold stander an invasive procedure responsible for severe complications and sample variability interpretation. Serum biomarkers for inflammation/fibrosis investigated to wave liver biopsy.

Aim: Diagnostic accuracy panel of Non-invasive serum biomarkers for hepatic fibrosis [Fibrosure, APRI score, Forns score] versus liver biopsy.

Method: 20 HCV patients subjected for: APRI, Forns, Fibrosure scores; PCR quantitative HCV-RNA; liver functions; lipid profile; CBC; ultrasound guided liver biopsy.

Results:

- **FORNS score;** AUROC (0.917) with 95% CI (0.791–1.042) for (f_0f_1) vs. ($f_2f_3f_4$) while (0.688) with 95% CI (0.464–0.91) for ($f_0f_1f_2$) vs. (f_3f_4). Cutoff (>6.9) sensitivity for significant fibrosis ($f_2f_3f_4$) and extensive fibrosis (f_3f_4) were (100%) specificity (0%) with accuracy (40%) and (20%) respectively.
- **APRI score;** AUROC (0.792) with 95% CI (0.568–1.015) comparing (f_0f_1) vs. ($f_2f_3f_4$) while was (0.875) with 95% CI (0.703–1.047) for ($f_0f_1f_2$) vs. (f_3f_4). Cutoff (<0.5) sensitivity (0%) and specificity (100%) with accuracy (60%) for significant fibrosis and (80%) for extensive fibrosis.
- **Fibrosure (fibro-acti test);** showed best AUROC (1.00) in different fibrotic stages with 95% CI (1.00–1.00). Cutoff (>0.59) sensitivity (50%) for significant fibrosis and (100%) for extensive fibrosis while specificity (100%) in all fibrotic stages. The PPV (100%) for significant and extensive fibrosis. NPV and accuracy (75%, 80%) respectively for significant fibroses, while NPV and accuracy (100%) for extensive fibrosis.

Significant correlation between liver biopsy and Fibro-test ($P=0.002$) and Acti-test ($P=0.000$).

Significant correlation between liver biopsy hepatitis activity score and APRI ($P=0.047$) and Forns score ($P=0.000$).

Conclusion: FORNS score wasn't considered since does not discriminate between significant and extensive fibrosis. Low sensitivity of APRI prohibits detection of minimal fibrosis and allow undetermined results. Fibrosure classified all cases of chronic HCV sufficient to waive liver biopsy.

PP-135 Discovery of the missed link between schistosomiasis and HCV infection

H. Abd El Moety¹, A. Abd El Moety²*, S. Zaki³, A.M.R. Abd El Moety². ¹Chemical Pathology, Medical Research Institute, Alexandria University, ²Internal Medicine, Faculty of Medicine, Alexandria University, ³Microbiology, Faculty of Medicine, Alexandria University, Egypt

Schistosomiasis is a term covering infestation of man by blood fluke trematode parasite. In Egypt, *Schistosoma mansoni* occurs intensively in the Nile Delta, while *S. hematobium* is endemic in Nile Valley. Studies in Egypt found the highest risk of HCV infection in those infested with schistosomiasis. HCV-Ab prevalence reported 70% in adults suffering from Schistosomiasis and without history of blood transfusion.

Aim: Determine the link between schistosomal infestation and HCV, whether the parasite could be vector of transmission of the virus to human.

Methods: Different stages of life cycle of *S. mansoni* provided by Theodor Bilharz Institute.

Specimens of living *S. mansoni* worms and *Biomphalaria alexandria* snails were grounded separately in sterile mortar after adding 5ml sterile saline. After centrifugation sterile supernatant tested for

- Detection of HCV-RNA by RT-PCR
- HCV-RNA quantitation.

Results:

- **HCV-Antigen:** Worms, Miracidia, Snails and Cercariae of *S. mansoni* were positive for HCV-Ag. The snails gave strong positive result. Eggs gave negative result.
- **HCV-RNA by RT-PCR:** Worms, Miracidia, Snails and Cercariae of *S. mansoni* tested for HCV-RNA By Qualitative RT-PCR were positive. The eggs gave negative result.
- **HCV-RNA Quantitation:** Miracidia were positive (800 copies/ml) and snails were positive (1100 copies/ml); other specimens gave negative results.

Conclusions:

- Existence of virus and its replication in parasite
- *S. mansoni* parasite carries HCV and considered as a non-human vector for transmission of HCV infection.
- Parasitic and viral co-infection change pathology of hepatic schistosomiasis from periportal fibrosis to cirrhosis and the development of HCC.

PP-136 Comparison study of DFPP plus IFN and ribavirin combination therapy for genotype 1b HCV patients with high HCV RNA load

L. Peng¹*, J. Liu¹, J.-G. Li¹. ¹Department of Infectious Diseases, 3rd Affiliated Hospital of SunYat-sen University, China

Background: Some genotype 1b HCV patients with high HCV RNA load can not get satisfactory anti-virus response. DFPP (double filtration plasmapheresis) is a newly developed biotechnology technique which can selectively removes high molecular weight substances including HCV particles from plasma. In this study, efficacy and safety of DFPP plus anti-virus therapy were studied and compared in treatment of HCV patients.

Methods: 8 chronic genotype 1b HCV patients received anti-virus therapy (IFN and ribavirin) at 8th day after admission and each of them individually decided whether to receive DFPP therapy. Then 8 weeks of observation were performed.

Result: Only 1 patient decided to receive 5 times of DFPP therapy (at 8th, 9th, 11th, 15th and 16st day after admission) with anti-virus therapy and got satisfactory response at 29rd day with liver function improving. Other patients did not get the same satisfactory responses. HCV RNA degression